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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,145	05/24/2001	Louis Dominic Oliveira	010080	2679
23696	7590	02/25/2004	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			GARY, ERIKA A	
			ART UNIT	PAPER NUMBER
			2681	//

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/865,145

Applicant(s)

OLIVEIRA, LOUIS DOMINIC

Examiner

Erika A. Gary

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimanuki, U.S. Patent No. 5,890,071 in view of Applicant's Admitted Prior Art (AAPR).

Regarding claim 1, Shimanuki discloses a device adapted to communicate with an audio mux, the audio mux receiving a vocoder input from a vocoder and an audio decoder input from an audio decoder, the device comprising: a stereo/mono control unit (11) coupled to a codec (104, 6A,6B); (Figure 1, 4-7 column 3, lines 31-40) the stereo/mono control unit receiving an input from the tuner(15), the stereo/mono control unit providing a control output to the codec to reduce power consumption in the codec. (Figure 1, 4-8; column 3, lines 61-66; column 4, lines 36-67; column 5, lines 1-32)

Shimanuki fails to specifically disclose the receiver path comprising an audio mux. AAPR discloses a receiving path having an audio mux. (Figure 1; page 3; lines 12-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimanuki to include an audio mux for the purpose of directing the audio signals to be output to either through either the loudspeaker (19) or the loudspeaker (9).

Regarding claim 2, Shimanuki in view of AAPR further discloses the device of claim 1 wherein the control output is coupled to a plurality of components in a receive audio processing path of the codec. (Shimanuki: Figures 1 and 4-7)

Regarding claims 3 and 4, Shimanuki in view of AAPR discloses the device of claim 2 but fails to disclose the device wherein the plurality of components are in a right or left channel of the receive audio processing path.

The AAPR discloses that the plurality of components may be in either a right or left channel of the receive audio processing path. (Figure 1; page 3, lines 4-27) It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimanuki such that the receive audio processing path included both a right channel and left channel for the purpose of allowing the audio signals to be output through either a loudspeaker (19) or a loudspeaker (9).

Regarding claim 5, Shimanuki in view of AAPR further discloses the device of claim 2 wherein the control output disables at least one of the plurality of components to reduce power consumption in the receive audio processing path of the codec. (Shimanuki: Figure 1, 4-8; column 3, lines 61-66; column 4, lines 36-67; columns, lines 1-32)

Regarding claim 6, Shimanuki in view of AAPR further discloses the device of claim 2 wherein the plurality of components comprise a receive gain, a receive filter, a digital-to- analog converter, a left/right selector, and a headset amp. (Shimanuki: Figure 6; column 7, lines 55-60; AAPR: Figure 1)

Regarding claim 7, Shimanuki in view of AAPR further discloses the device of claim 6 wherein the control output disables at least one of the plurality of components to reduce power consumption in the receive audio processing path of the codec.

(Shimanuki: Figure 1, 4-8; column 3, lines 61-66; column 4, lines 36-67; columns, lines 1-32)

Regarding claim 8, Shimanuki in view of AAPR further discloses the device of claim 1 wherein the control output disables at least one of a plurality of components in a receive audio processing path of the codec when the audio mux input received by the stereo/mono control unit comprises voice signals. (Shimanuki: Figure 1; 4-7; column 3, lines 61-66; column 4, lines 36-67; column 5, lines 1-32)

Regarding claim 9, Shimanuki in view of AAPR further discloses the device of claim 8 wherein the plurality of components comprise a receive gain, a receive filter, a digital-to-analog converter, a left/right selector, and a headset amp. (Shimanuki: Figure 6; column 7, lines 55-60; AAPR: Figure 1)

Regarding claims 10 and 11, Shimanuki in view of AAPR further discloses the device of claim 1 wherein the stereo/mono control unit further inherently receives plug-in detection input from a plug-in detection circuit that receives an I/O input from an I/O jack as evidenced by the fact that when it detected that the plug of headset (24) is inserted into the headset jack, other processes are performed. (Shimanuki: column 7, line 57column 8, line 12)

Regarding claims 12, 16 and 17, Shimanuki discloses a method for processing received audio signals in a device, the method comprising disabling a tuner circuitry

when the audio signals comprise voice signals; and enabling the telephone circuitry when the audio signals comprise music signals. Shimanuki further discloses the concept of providing power to both the tuner and telephone circuitry when the tuner is selected and providing power to only the telephone circuitry when the tuner is not selected for the purpose of conserving power. (Figure 1, 4-8; column 3, lines 61-66; column 4, lines 36-67; column 5, lines 1-32)

Shimanuki fails to disclose that the receive audio path comprising a first channel and a second channel.

The AAPR discloses that the plurality of components may be in either a right or left channel of the receive audio processing path. (Figure 1; page 3, lines 4-27) It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimanuki such that the receive audio processing path included both a right channel and left channel for the purpose of allowing the audio signals to be output through either a loudspeaker (19) or a loudspeaker (9).

Regarding claim 13, Shimanuki in view of AAPR discloses the method of claim 12 wherein the disabling of the first channel is performed by a stereo/mono control unit. (Shimanuki: Figure 1, 4-8; column 3, lines 61-66; column 4, lines 36-67; column 5, lines 1-32)

Regarding claim 14, Shimanuki in view of AAPR discloses the method of claim 13 wherein the disabling of the first channel is performed by the control output of the stereo/mono control unit disabling at least one of a plurality of components in the first

channel. (Shimanuki: Figure 1, 4-8; col. 3, lines 61-66; col. 4, lines 36-67; col. 5, lines 1-32)

Regarding claim 15, Shimanuki in view of AAPR discloses the method of claim 14 wherein the plurality of components comprise a receive gain, a receive filter, a digital-to-analog converter, a left/right selector, and a headset amp. (Shimanuki: Figure 6; col. 7, lines 55-60; AAPR: Figure 1)

Regarding claim 18, Shimanuki in view of AAPR discloses the method of claim 13 wherein the device comprises a vocoder and an audio decoder, (Shimanuki: Figures 1 and 4-7). Shimanuki fails to specifically disclose the receiver path comprising an audio mux that receives voice signals from the vocoder and music signals from the audio decoder. AAPR discloses a receiving path having an audio mux. (Figure 1; page 3, lines 12-13) It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimanuki to include an audio mux for the purpose of directing the audio signals to be output to either through either the loudspeaker (19) or the loudspeaker (9) depending on whether the signals are voice or music.

Regarding claim 19, Shimanuki in view of AAPR discloses the method of claim 18. Shimanuki fails to specifically disclose the receiver path comprising an audio mux. AAPR discloses a receiving path having an audio mux. (Figure 1; page 3, lines 12-13) It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Shimanuki to include an audio mux for the purpose of directing the audio signals to be output to either through either the loudspeaker (19) or the loudspeaker (9).

Regarding claim 20, Shimanuki in view of AAPR discloses the method of claim 12 further comprising determining whether a stereo output component is coupled to the device. (Figure 1, 4-8; column 3, lines 61-66; column 4, lines 36-67; column 5, lines 132)

Regarding claim 21, Shimanuki in view of AAPR discloses the method of claim 20 further comprising disabling the first channel when the stereo output component is not coupled to the device. (Figure 1, 4-8; column 3, lines 61-66; column 4, lines 36-67; column 5, lines 1-32)

Response to Arguments

2. Applicant's arguments filed September 29, 2003 have been fully considered but they are not persuasive. Applicant argues that Shimanuki does not disclose a stereo/mono control unit that provides a control output to reduce power consumption in the codec. However, the Examiner respectfully disagrees as Shimanuki teaches intermittently supplying power to the telephone section to save power [col. 4: lines 58-61]. Further, Shimanuki teaches that the codec is part of the telephone section [col. 3: lines 3-6]. Hence, the claim limitations are read in the reference.

Applicant also argues that Shimanuki and AAPR do not teach disabling and enabling a first and a second channel in a receive audio processing path based on whether the audio signal is a voice signal or a music signal. However, the Examiner respectfully disagrees. Shimanuki teaches disabling a tuner circuitry when the audio signals comprise voice signals and enabling the telephone circuitry when the audio

signals comprise music signals. The AAPR discloses that it is known to have the plurality of components in a right or left channel of the receive audio processing path. (Figure 1; page 3, lines 4-27) It would have been obvious to include the first and second channels as Shimanuki teaches separate disabling and enabling of the tuner and telephone circuitry. Further, since Shimanuki teaches providing output to a first or second output [loudspeaker (19) or loudspeaker (9)], it would have been obvious to include first and second channels.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erika A. Gary whose telephone number is 703-308-

Art Unit: 2681

0123. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh N. Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EAG
February 23, 2004


ERIKA GARY
PATENT EXAMINER